



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,017	10/05/2000	Vipul Bansal	JP920000236US1	8559

7590 08/26/2004
McGinn & Gibb PLLC
Suite 304 2568 A Riva Road
Annapolis, MD 21401

EXAMINER

REAGAN, JAMES A

ART UNIT PAPER NUMBER

3621

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,017

Applicant(s)

BANSAL ET AL.

Examiner

James A. Reagan

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

DETAILED ACTION

Status of Claims

1. Claims 1, 9, and 17 have been amended.
2. The rejections of claims 1-24 have been altered to reflect the amended limitations.
3. Claims 1-24 have been examined.

RESPONSE TO ARGUMENTS

4. Applicant's arguments received on have been fully considered but they are not persuasive. Referring to the previous Office action, Examiner has cited relevant portions of the references as a means to illustrate the systems as taught by the prior art. As a means of providing further clarification as to what is taught by the references used in the first Office action, Examiner has expanded the teachings for comprehensibility while maintaining the same grounds of rejection of the claims, except as noted above in the section labeled "Status of Claims." This information is intended to assist in illuminating the teachings of the references while providing evidence that establishes further support for the rejections of the claims.
5. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3, 6-11, 15-19, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (US 5,640,569 A) in view of Krishnaswamy et al. (US 5,867,494 A), and further in view of Gray et al. (US 2002-0082856 A1).

Examiner's note: Examiner has pointed out particular references contained in the prior art of record in the body of this action for the convenience of the Applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply. Applicant, in preparing the response, should consider fully the *entire* reference as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

Claims 1-3, 8-11, 16-19, and 24:

With regard to the limitations of:

- *providing different levels of service by dynamically allocating and pricing said resources based on customers' changing needs, and their willingness to pay for different service levels,*
- *wherein said allocation occurs using a dynamic negotiation between said customers and said resource center, and wherein said dynamic negotiation comprises any of:*
 - *said customers requesting said resource center to acquire and release resources at any time;*

- *said resource center conducting an auction of all available resources in a shared resource pool at predetermined intervals to determine said allocation and price of said resources for a subsequent time interval; and*
- *said resource center publishing said prices at which said resources of a shared resource pool can be acquired or released by said customers, whereby said customers use said prices for determining whether to request releasing or acquiring said resources;*
- *said means for dynamically allocating and pricing resources is through mutual negotiations between said customers and said resource center either through electronic communication means or otherwise,*
- *mechanism for conducting an online auction of said resources by the resource center in case of non-availability of adequate idle resources to meet a customer request followed by re-allocation of said resources to said customers, updating of billing information and pricing based on the results of the auction of resources,*
- *mechanism for conducting an online auction of resources at pre-specified intervals of time followed by re-allocation of said resources to said customers, updating of billing information and pricing based on results of the auction of resources,*
- *mechanism for publishing the current prices for each class of resources at any point of time and means for updating the current prices dynamically based on requests for release or acquisition of resources by customers, followed by updating of billing information,*
- *the arrangement being such that said mechanisms operate either individually or together in any combination of at least two mechanisms depending upon the requirement.*

- *said resources in a resource center includes servers, storage media, software applications and bandwidth of communication link connecting said servers center to a network.*

Miller, in at least the abstract and column 2, line 58 to column 3, line 30, discloses allocation of computer resources based on a bidding auction system. Miller does not specifically disclose dynamic allocation of resources, but Krishnaswamy, in column 31, lines 48-51 does. Krishnaswamy also discloses specialized billing methods (see at least column 20, lines 35-39) and service level agreements, inherently disclosing different levels of service (column 30, lines 8-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Miller's online auctioning system for allocating resources with Krishnaswamy's dynamic allocations of resources and associated billing practices because "The cheaper a resource becomes, the more important it becomes to have automatic management of that resource in a principled fashion. This is because the increased capacity makes it possible to apply that resource to lower-value uses. When a resource is expensive, all uses, in order to be worth the amount they consume, must exceed some minimum value to their users, so all uses of an expensive resource have high and comparable values" (Miller, column 1, lines 14-22).

Although the combination of Miller/ Krishnaswamy essentially discloses redistributing resources between consumers in an auction environment, the newly added limitation of *wherein said allocating of said resources comprises transferring, by said resource center, said resources from one customer to another customer* is not specifically disclosed. Gray, however, in at least paragraph 0036 discloses rebalancing and redistribution of resources. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Miller's online auctioning system for allocating resources and Krishnaswamy's dynamic allocations of resources and associated billing practices with gray's redistribution technique because balancing resources ensures maximum use and profitability.

Claims 6, 14, and 22:

With regard to the limitations of *said current prices comprise the current price at which resources are allocated to customers, the new price that would prevail if specified units of resources are released by customers and the new price that would prevail if specified units of resources are acquired by the customers*, Miller, in column 2, lines 12-25, discloses various pricing/bidding schemes and auction formats.

Claims 7, 15, and 23:

With regard to the limitation of *each class of resources has some units dedicated to specific customers and the remaining units can be dynamically allocated to customers by the resource center*, the combination of Miller/Krishnaswamy, as shown above, discloses various auction techniques. Miller/Krishnaswamy do not specifically state that certain resources are set-aside for certain customers. However, Examiner takes **Official Notice** that it is old and well known in the goods and services supply arts to maintain regular and repeat customers that routinely request and expect a standard amount of product to be supplied to them on a habitual basis. Dedicating a specific or minimum amount of the supply to specific recurring clients provides consistent throughput and profit.

8. Claims 4, 5, 12, 13, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller/Krishnaswamy et al. (US 5,867,494 A) and further in view of Ferstenberg et al. (US 5,873,071 A).

Claims 4, 5, 12, 13, 20 and 21:

The combination of Miller/Krishnaswamy discloses the online allocation auction and billing above. Miller/Krishnaswamy do not specifically disclose:

- *mutual online negotiations can take place between software-based agents representing said customers and said resource center,*
- *means enabling the customers to provide price and service level related inputs to their respective software-based agents,*
- *means for said software-based agents representing customers to monitor the usage of resources allocated to them and the levels of service being obtained, and*
- *means for said software-based agents representing customers to use,*
- *said inputs from said customers and said usage and/or said levels of service being obtained to dynamically determine when to request the software agent representing the resource center for acquiring or releasing resources at various prices;*

Ferstenberg, however, in column 3, lines 22-41, discloses e-agents that conduct electronic negotiations according to rules established by a participant. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine Miller/Krishnaswamy dynamic allocations of resources and associated billing practices with Ferstenberg's electronic negotiating agents because "...it permits the participant the flexibility to dynamically adapt to market conditions that affect the price and availability of individual commodities" (Ferstenberg column 2, lines 39-43).

Application/Control Number:
09/680,017
Art Unit: 3621

Page 8

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **James A. Reagan** whose telephone number is **(703) 306-9131**. The examiner can normally be reached on Monday-Friday, 9:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **James Trammell** can be reached at (703) 305-9768.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Receptionist** whose telephone number is **(703) 305-3900**.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 305-7687 [Official communications; including After Final communications labeled "Box AF"]

(703) 308-1396 [Informal/Draft communications, labeled PROPOSED or "DRAFT"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7th floor receptionist.

JAR
23 August 2004

A handwritten signature in black ink, appearing to read 'JAR', with a long horizontal flourish extending to the right.